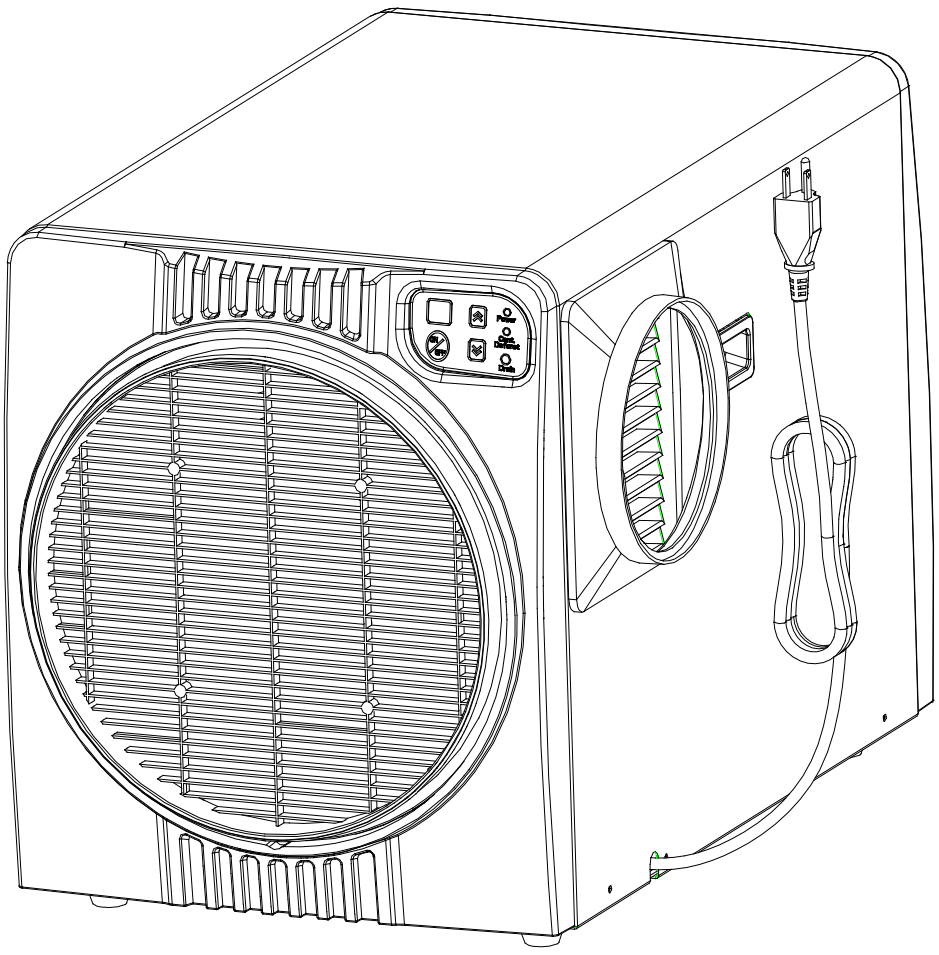
Horizon® Eclipse - Installation and Operations Manual



Air Cleaning Equipment, Inc.
303 N. Main St.
Broadway, NC 27505
www.horizondehumidifiers.com

Safety Notes:

- The Horizon Series Dehumidifier must always be connected using the grounded electrical connection as required for all electrical appliances. The warranty is voided and all responsibility for the operation is born by the owner if non-grounded wiring is utilized.
- The Horizon Dehumidifiers must only be maintained and serviced by a qualified technician.
- The Horizon Dehumidifiers are intended only for operation when oriented with the unit sitting on its feet and level. Any other orientation could cause water to come in contact with the electrical components.
- Remove plug before moving dehumidifier.
- If any water may have spread throughout unit, the unit should be opened and allowed to dry thoroughly before reconnecting to electric and restarting.
- For proper operation, neither the inlet nor discharge should be positioned against a wall. The inlet requires a minimum of 12" clearance and the discharge requires a minimum of 36" clearance.
- For proper diffusion of air throughout the room, the best option would be to have the discharge blowing away from a wall and the inlet pulling air in parallel to the wall.
- Do not insert any objects or fingers into the inlet or discharge. If service is required, call a qualified technician. All work on unit should be done with the unit "off" and unplugged.
- Do not use water to clean unit exterior. Only use a damp cloth to clean exterior and always unplug the unit first.
- Do not use unit as shelf or device to hang clothes. This could cause damage to unit.
- Do not stand on machine.
- The inlet filter generally does not need to be cleaned more than once per month

Identification:

For future reference, write down the model, serial number, date of purchase so you can identify your unit when seeking assistance

Model Number Horizon Eclipse
Serial Number _____
Date of Purchase _____

NOTE: Data label has key operational characteristics of this specific unit.

Customer Service:

For additional questions concerning the operation of your dehumidifier, please:

- Contact your installing contractor
- Please call ACE at 919-258-3330
- Email: sales@horizondehumidifiers.com

WARNING: 120 Volts AC may cause serious injury from electric shock.

1. Disconnect electrical power before servicing
2. Only plug unit into grounded electrical outlet
3. Do not use extension cord
4. Do not use plug adapter

Power Supply:

115V, 60 Hz AC Only 1 Phase

Outlet Requirement: 3-Prong, GFI
Circuit Protector: 15 Amp Time Delay Fuse or Circuit Breaker

Principle of Operation

The Horizon Series Dehumidifier utilizes its integral humidistat to monitor the conditioned space. When the relative humidity goes above the selected set point, the dehumidifier will energize. Air is drawn across an evaporator coil. The evaporator coil is cooler than the dew point of the air so moisture will condense out of the air. Air is then reheated through the condenser coil and distributed back into the room.

Installation:

The area to be controlled should be sealed with a vapor barrier. If unit is installed in a crawlspace, all vents should be sealed.

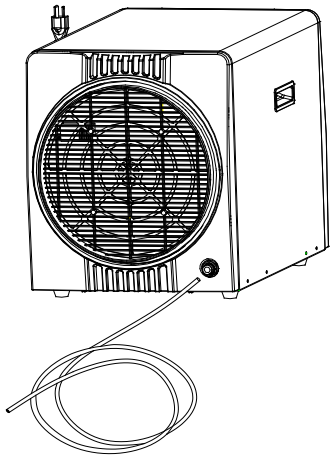
WARNING: It is recommended to remove dehumidifier from area if applying a liquid vapor barrier. Some coatings dry via "solvent evaporation," which can be harmful to certain components in your dehumidifier. Allow coating to completely dry and exhaust vapors prior to positioning dehumidifier. Read and follow coating manufacturer's instructions completely.

1) Place dehumidifier on level surface

WARNING – If after unit is positioned,

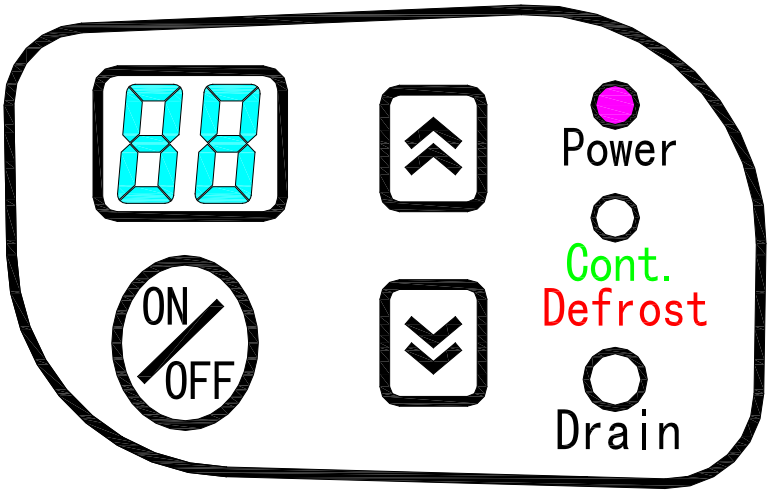
it is moved in such a manner that the compressor didn't remain in a vertical orientation, wait a minimum of 2 hours before turning the unit "on."

2) Drain Line
    - Included drain line attaches to the unit via a compression type fitting on the discharge end of the unit. Remove the compression nut and slide it over the end of the hose to be attached to the unit. Slide that end of the tube over the insert on the compression fitting completely. Tighten compression nut.
    - Drain line should be routed to a suitable drain or outside. Because the unit features an integral drain pump, drain line may go vertically up 10' prior to reaching final drain location.



Drain Tube – 20' Long. 10 mm OD.

3) Plug unit into 15 amp grounded outlet.



Key functions

1. Power Key

indicator light must be on indicated unit is plugged in and has power to it. Press the on/off button, and the machine will start running (Two Beeps). Press this key again, the machine will stop running (Single Beep). The display will read room humidity levels except while you're adjusting the setpoint humidity level. NOTE: When unit is turned off, the fan will run for 1 minute prior to shutting off.

2. Increase Humidity button

Press this button to set indoor humidity , according to this sequence: 60%, 65%, 70%, 80%. When the indoor humidity is lower than the set humidity, the machine will stop automatically. When indoor humidity is higher than setpoint, the unit will operate.

3. Decrease Humidity button

Press this button to set indoor humidity , according to this sequence: 60%, 55%, 50%, 45%, 40%. When the indoor humidity lower than set humidity, the machine will stop working automatically. When the indoor humidity is higher than setpoint, unit will operate.

4. Continuous Mode button

Press either the increase or decrease humidity buttons. Once you hear an audible beep, press both buttons simultaneously to put the dehumidifier into “continuous” mode.”

The

indicator light on will illuminate green indicating the unit is in continuous mode.

The unit will continue to operate regardless of humidity level until the user manually changes the humidity setting, turns the unit off or presses again and the unit will return to normal humidistat control operation.

NOTE: The humidity levels shown on the unit display are approximate only. They are roughly +/- 2%.

5. Manual Drain Button

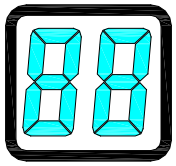
For extended storage or movement of the machine, please press the “Drain” bottom to remove water from the integral pump’s reservoir.

6. Pump Trouble Warning

When pump reservoir water level hits high level switch, there is probably an issue with the pump. This machine will stop the compressor automatically if the high water sensor is reached. After 1 minute delay, the fan motor will turn off. The LED display will display

“E2/E4” and the machine will not operate until the problem is resolved. To reset the unit after confirming the pump is functioning properly, unplug the unit for two minutes.

Indicator Lights



Led humidity display

This led indicator shows two functions

1. When the power supply is on, the Led indicator shows indoor humidity
2. When you set humidity, the Led indicator shows the set humidity

Power Indicator Light

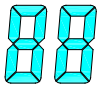
This indicates the unit has been plugged in and is ready to operate. Please make sure this light is “off” prior to performing any service on this unit.

Continuous Mode Light

This indicates unit has been set in the “Continuous” operation mode. Light will illuminate green color.

Auto defrost

When the Auto Defrost light glows red, it means the unit is in the defrost mode and is clearing the evaporator coil of any ice buildup.

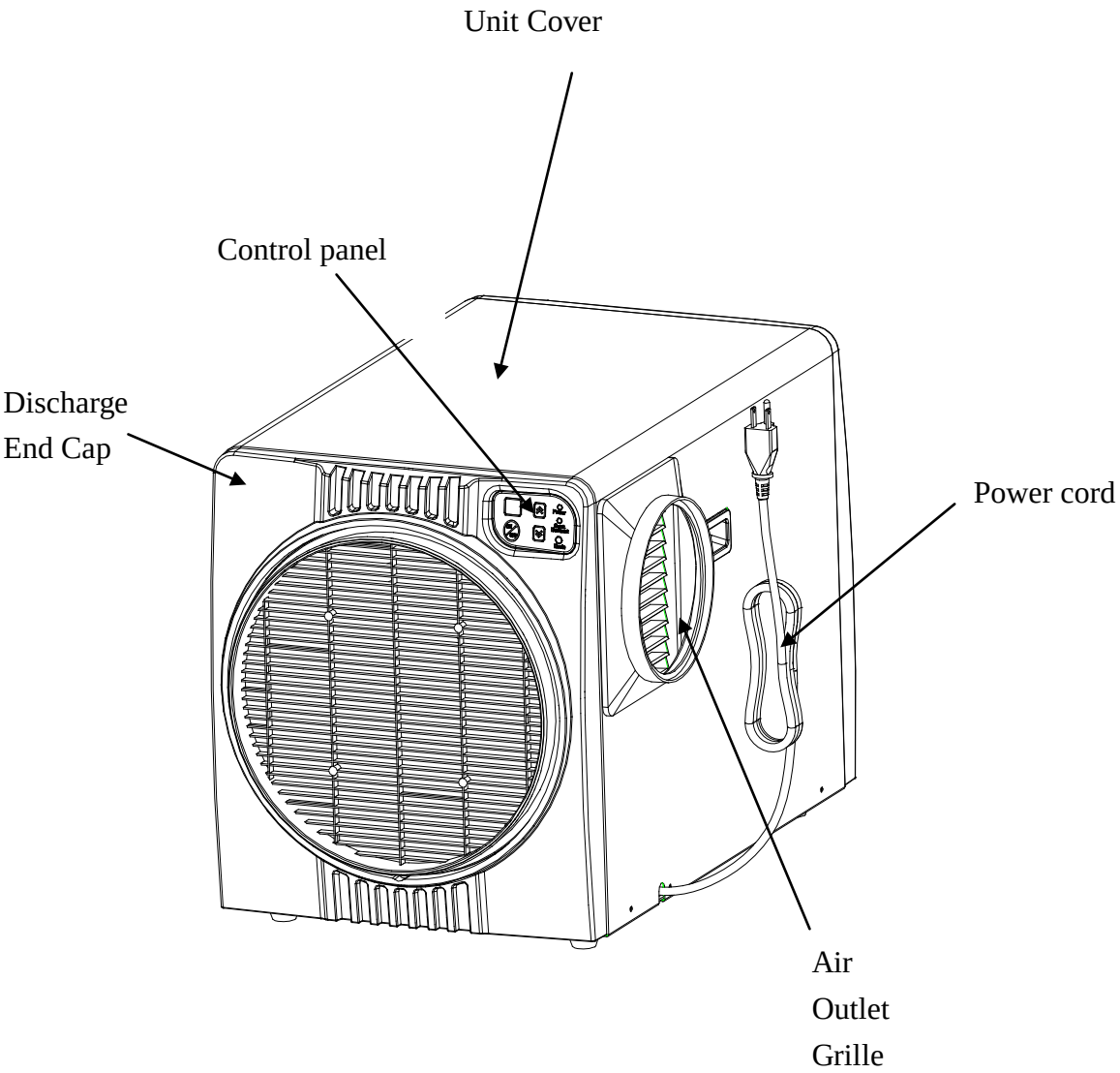


Humidity Display Lights

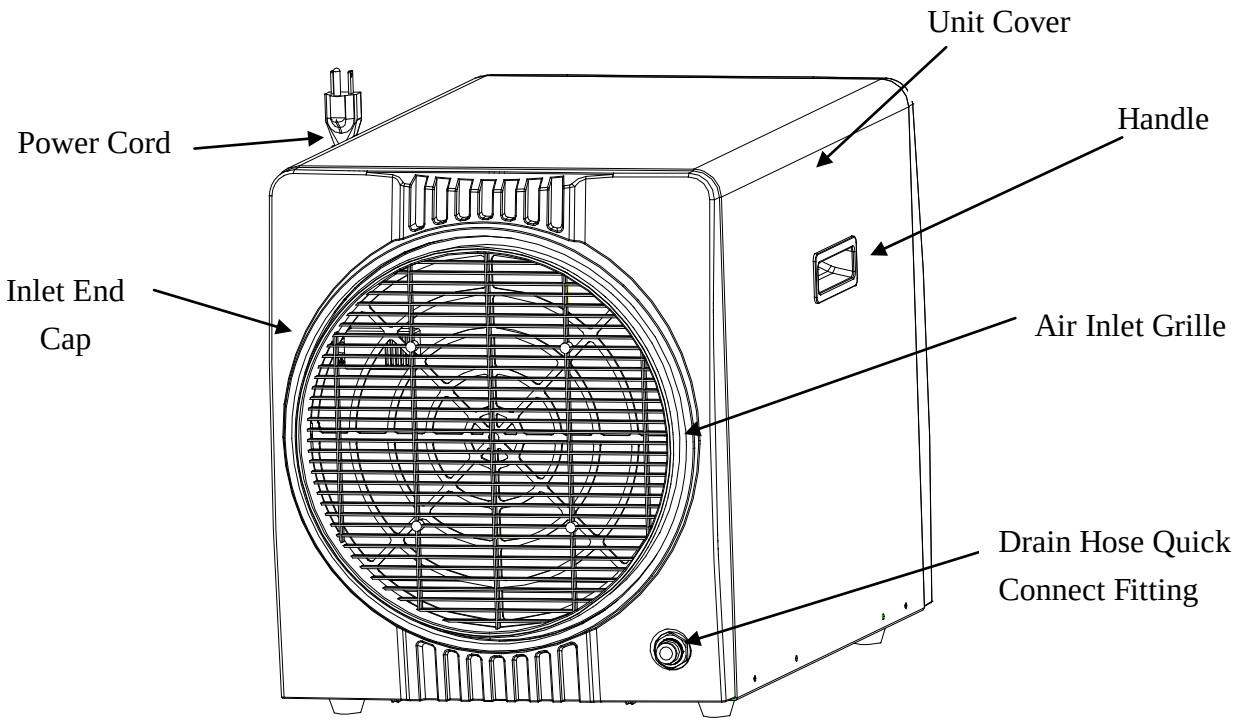
These lights have 2 functions:

1. When the power is on, it shows indoor humidity level
2. When you set humidity value, it shows the selected humidity setpoint. After a brief delay, the display will go back to the actual indoor humidity level.

Horizon Eclipse – Front View



Horizon Eclipse – Back View



Operating Instructions

1. Start the machine

As soon as the machine is powered on the first time, the buzzer will buzz. Adjust the humidity level to the desired setpoint (typically 50-55%). Press

to start the machine.

2. Stop machine

Press

and the machine will stop. Note the fan will operate for 1 minute after the unit has been turned off.

DO NOT unplug the power cord directly to force the machine stop working directly. This will prevent the pump from automatically working and may cause water to leak from the unit. Prior to unplugging the unit, let it sit for 15 minutes and press the drain button to insure all water is removed from pump reservoir.

3. Water Drainage

The Horizon Eclipse has both automatic and manual draining capability. During normal operation, the Eclipse will automatically drain as required. If you would like to store or move the machine, you may press Drain to drain the water from the pump reservoir. Drain will operate for 15 seconds each time button is depressed. It may be necessary to press button more than once to completely empty reservoir.

Maintenance

WARNING – ALWAYS UNPLUG THE UNIT PRIOR TO DOING ANY SERVICE WORK

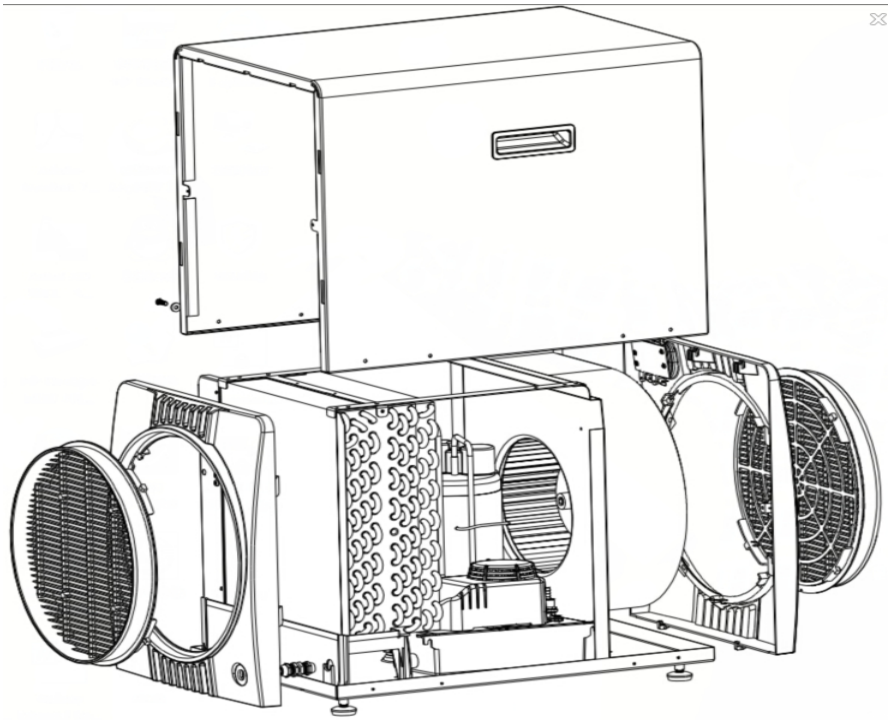
Condensate Pump

Your Horizon Eclipse is equipped with an integral condensate pump designed to pump condensate from your dehumidifier out to the desired drain. This pump requires routine maintenance that is not covered by your 1 year parts warranty. Only a defective pump will be repaired or replaced during the warranty period.

Preventative Maintenance

As with all pumps, preventative maintenance is necessary to prevent issues from dirt and slime that may accumulate in the drain system – including the drain pan, hose to the condensate pump, pump reservoir, pump head and float assembly, and discharge tubing.

***At least once per year, clean pump system.**



Cleaning/Disinfecting Options:

Basic-

1. Press drain button to drain water from reservoir.
2. Disconnect power to dehumidifier.
3. Pour a 16 oz solution of either 1 oz bleach to 15 oz water or 4 oz white vinegar to 12 oz water into the drain tray at the base of the coils.

   Note: If you get any cleaning solution on the coils, flush with water.
4. Allow to soak for 15 minutes.
5. Reconnect power to dehumidifier.
6. Fill reservoir and flush/cycle pump at least two times.
7. Repeat if needed or refer to **Advanced** instructions.

Advanced-

1. a.Use manual drain button, to drain water from reservoir.
   b.Unplug the dehumidifier and remove cover to access pump
   c.Pump head can be removed from reservoir by pressing on tabs
   d.A wet-dry vacuum or towels can be used to remove remaining water from reservoir
2. Fill pump reservoir with a diluted cleaning solution (15 oz water to 1 oz bleach or 12 oz water to 4 oz white vinegar).
3. Reassemble pump and use manual pump button to flush mixture through discharge tubing.
4. Pour same diluted mixture slowly into drain pan under evaporator coil and allow it to clean hose from pan to pump. This process can be stopped when the pump energizes 1 time.

   Note: If you get any bleach/water mixture on coils, flush with water.
5. Pour sufficient clean water through drain pan to force pump to activate twice.
6. Reassemble unit and return it to operational status.

   Coil-

   If necessary, clean your coils with a vacuum or approved coil cleaner.

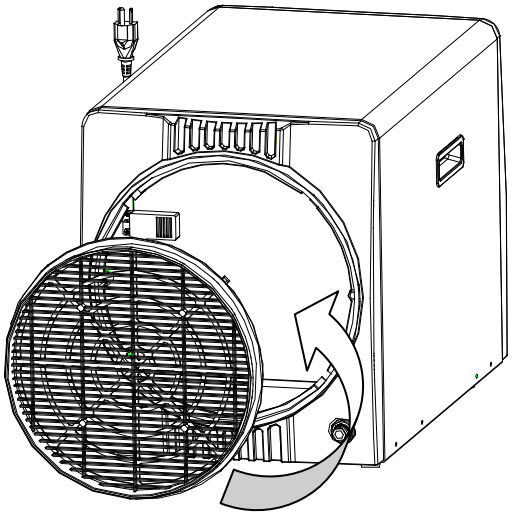
Cleaning the machine body

Use soft damp cloth to clean exterior of unit. No solvents should be used.

Cleaning the Filter

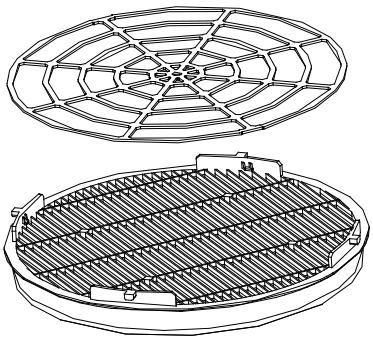
1. Unplug the unit.
2. Disassemble the filter mesh

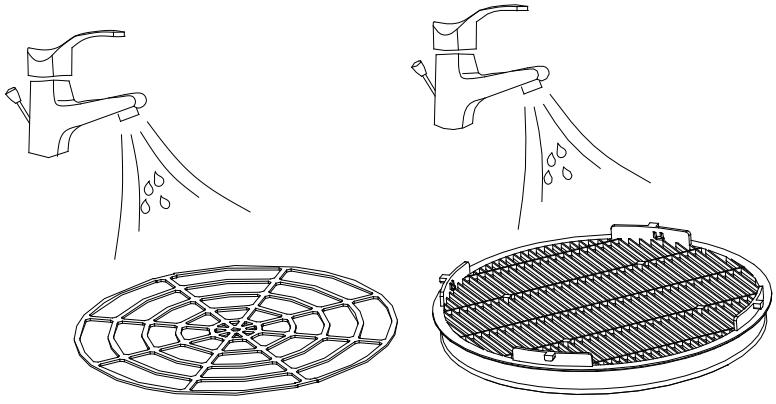
At the Inlet End of Unit, spin to remove the filter mesh in counter-clockwise direction



3. Cleaning the Filter Mesh:

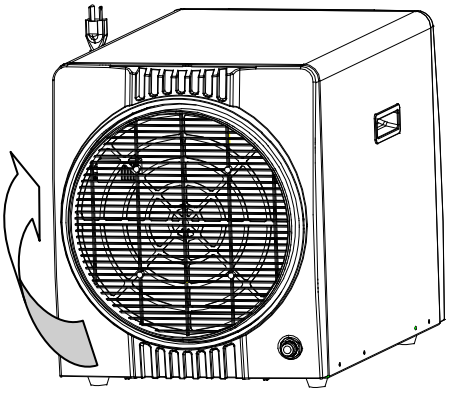
Filter may be cleaned by vacuuming or by washing with warm water (no soap or solvents). Insure filter is dry prior to restarting unit.





4. Reinstall the filter mesh:

Filter mesh insert at the back of machine, rotate in clockwise direction



Insert the filter mesh into the machine gradually

Dehumidifier storage

If the unit will be stored for an extended period of time:

1. Turn unit off and allow to dry.
2. Manually drain pump reservoir
3. Wrap and secure the power cord
4. Clean the filter mesh
5. Store in clean, dry environment.

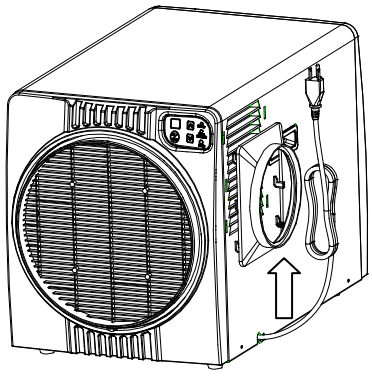
Ducting of Unit

Ducting of unit allows unit to be in one room while conditioning an adjacent room. Inlet/return grille is designed for 12" Flex. Supply grille is designed for 6" flex. Secure with tie wrap.

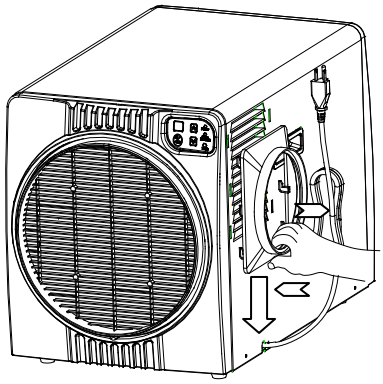
1. Maximum total duct run = 10'.
2. Maximum run if only ducting inlet or outlet = 6'.
3. It may be helpful to remove inlet grille from end cap when connected flex duct.

For optional supply ducting, a separate supply duct adapter is included.

1. Supply Duct Adapter

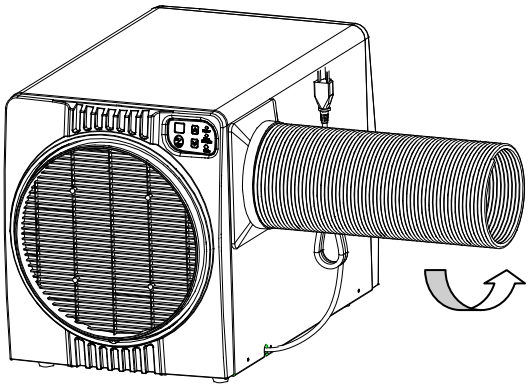


To install, line adapter up with holes on side of unit and push up from base of adaptors.

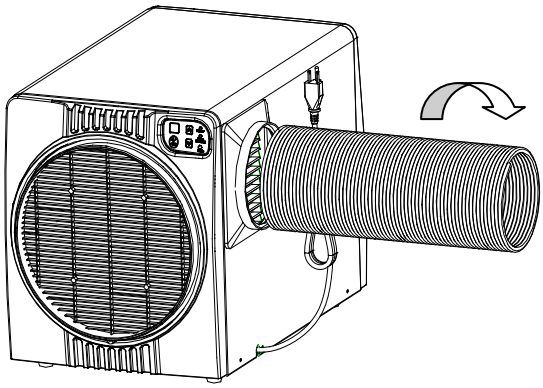


If necessary to remove, from bottom of adapter, use the thumb to press the outer side plate to inside, outer four fingers pull from outside, lift the hooks out of cover holes and then remove the supply adapter

2. Flex Duct Installation

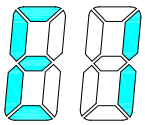


Installation: rotate the flex duct in counter-clockwise direction. Secure with wire tie



Disassembly: Remove wire tie rotate the flex duct in clockwise direction.

Troubleshooting

Symptom	Cause	Solution
Machine Won't Run	Power Cord Connection	Insure Plug Fully Inserted in Outlet
	Room temperature Over 105 degree F or Below 33 Degree F	Units Outside Operating Temperature Range，Manual restart of machine after room returns to design conditions
Cannot start the dehumidifier	Air Filter Clogged	Clean the filter mesh according to instructions in manual
	Air inlet or outlet jammed	Clear the blockage from air inlet or air outlet
Loud Noise	Machine Not Level	Move to flat and firm ground
	Filter mesh jammed	Clean the filter mesh according to instructions in manual
Trouble code:E1 	E1 = Humidity Sensor Issues.	Check to insure wire is connected at both ends. If all looks good, sensor may be faulty.
Trouble code	Flashing Red = Temperature Sensor Issues	Check to insure wire is connected at both ends. If all looks good, sensor may be faulty.

Pump Alarm-Error Code E2/E4

If a pump alarm is provided on display:

1. Reset unit by disconnecting power cord and then reconnecting. NOTE: Unit will not function until error code has been cleared.
2. Manually check to see if pump is operational. Press manual drain button and see if pump energizes and de-energizes prop and if any water is purged from system. If you haven't cleaned the system recently, check discharge line for obstruction and clean balance of pump system per instruction above.
3. Replace hoses and or pump if maintenance alone is not sufficient.

Warranty

Seller warrants the equipment to be free from defects in workmanship and materials for a period of 12 months after shipment (60 months/5 years on compressor, evaporator and condenser). This warranty is limited, however, to the repair or replacement of defective equipment. If it is necessary to return unit for service, customer is solely responsible for proper packaging, transportation costs. Customer must initiate warranty process by contacting factory. Do not send any component or product back to factory without Return Material Authorization.

This limited warranty does not apply to any part or component that is damaged in transit or when handling, has been subject to misuse, has not been installed, operated or serviced according to the Seller's instructions, or has been operated beyond the factory-rated capacity or has been altered in any way. Routine maintenance is not covered by this warranty.

Seller's liability is limited to replacement of defective parts or components and does not include any cost of labor (including, but not limited to, labor to remove and/or reinstall any defective part), refrigerant or piping. Customer may elect to have unit fixed locally in which case required replacement parts will be sent to customer at customer's expense.

ACE shall not be responsible for loss of use of any product, loss of time, inconvenience, or damage to other equipment, or any other indirect or consequential damage with respect to property whether as a result of breach of warranty, neglect, or otherwise.

THE WARRANTIES AND LIABILITIES SET FORTH ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. Air Cleaning Equipment's total liability, regardless of nature of claim shall not exceed original purchase price of the product. If a product or component is replaced while under warranty, the applicable warranty period shall not be extended beyond the original warranty time period.

The foregoing shall constitute the total liability of seller in the case of defective performance of all or any of the equipment or services provided to Buyer. Buyer agrees to accept and hereby accepts the foregoing as the sole and exclusive remedy for any breach or alleged breach of warranty by Seller.